

DISCUSSION ON THE NATURE AND TREATMENT OF EXOPHTHALMIC GOITRE, WITH SPECIAL REFERENCE TO THE THYROID THEORY, AND THE QUESTION OF THYROIDECTOMY.

Dr. M. ALLEN STARR opened the discussion. He urged the theory that this disease was due to hyperactivity of the thyroid gland—a theory first proposed in 1886, and which had gradually gained ground since then. The essential symptoms of exophthalmic goitre are swelling of the thyroid gland, protrusion of the eyeballs, rapid heart action, burning of the skin and perspiration, intense nervous excitement, irregular and rapid respiration, and sudden exhaustion. In myxœdema there was a primary atrophy of the thyroid gland, or a destruction of the gland by a cystic growth. There was also a marked tendency to the falling of the eyelid independently of the thickening of the lid. In exophthalmic goitre the eyes were abnormally wide open, and there was a tendency to retraction of the upper lid. The condition of the heart and arteries in myxœdema was exactly the opposite of that found in exophthalmic goitre, the pulse being slow and of high tension. In myxœdema the skin is thickened, and dried, the growth of the hair is impaired, and the nails are discolored. In exophthalmic goitre the skin is soft, moist and smooth, and the hair and nails grow rapidly. In myxœdema the patients suffer constantly from a sensation of cold; in exophthalmic goitre they suffer from a sensation of heat, and at times the temperature is actually elevated from half to one degree. In myxœdema the patients are particularly dull and apathetic; the patients with exophthalmic goitre are characteristically alert and active, and intensely emotional. In exceptional cases acute mania is a curious complication. Patients with exophthalmic goitre show an abnormal physical activity.

In the treatment of myxœdema by thyroid extract, he had repeatedly observed that the use of an excessive quantity produced a rise of temperature, increased rapidity of the pulse, burning of the skin, flushing and exophthalmos. The rapidity of the pulse had been in-

glands. This fact seemed to indicate that the gland was secreting more actively than normal. From the altered staining of the colloid material, he had been led to infer that the secretion was altered in character. Considering the condition of the blood-vessels during life, the vascular changes in the glands were surprisingly slight. There were a number of apparently well authenticated cases of Basedow's disease which had been markedly benefited by thyroid extract.

Dr. STARR, in closing the discussion, said that the surgeons were agreed as to the great number of new blood-vessels found in the gland at the time of operation. The secreting activity of the gland had been particularly noticed in those cases treated by operation and simple exposure of the thyroid gland without extirpation. If the disease were due to disturbed secretion, it did not seem to him that we could get the results in myxœdema that we did from the thyroid treatment. The experiments performed by Dr. Cunningham went to show that the effect of extirpation of the thyroid in the lower animals was essentially different from that produced in the human subject, and also that the effects of the administration of thyroid extract to animals was different from that seen in man.